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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,122	09/24/2001	Pieter Adriaan Oosterling	03330-P0010A	5702

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EXAMINER

NGUYEN, SON T

ART UNIT PAPER NUMBER

3643

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,122

Applicant(s)

OOSTERLING ET AL.

Examiner

Son T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12, 14-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Son T. Nguyen
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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-5,7,12,14-20,22** are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Lely et al. (US 5769025) in view of Demirag (US 3752354).

For claim 1, van der Lely et al. disclose a device for milking animals comprising at least one milking stall (as shown in fig. 1) for extracting milk; means for de-aerating milk (col. 5, line 8); means 31 for conveying de-aerated milk to a milk tank 60 for storage, wherein the storage volume of the milk tank is a closed chamber. However, van der Lely et al. are silent about the chamber of the tank being a variable storage volume chamber such that substantially no empty space is present in the closed chamber.

Demirag teaches a tank for storage of liquid in which the tank is a closed chamber 17 having a variable storage volume which corresponds to the volume of the liquid stored therein such that substantially no empty space is present in the closed chamber (see figs. 2 & 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the variable storage volume tank such that substantially no empty space is present in the closed chamber as taught by Demirag in place of the storage tank of van der Lely et al. so as to provide a versatile

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tank which can function to carry liquid and save space at the same time due to its ability to have variable volume.

For claim 2, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) further disclose cooling means for cooling the milk as the milk is being conveyed into the tank (col. 9, lines 32-43). In another word, as the first drop of milk enters the tank, the sensor 123 detects this and sends to the computer 9, which in turn activate the cooling means, while the rest of the milk is being conveyed into the tank.

For claim 3, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) are silent about the milk tank is positioned in a cooled environment. It would have been obvious to one having ordinary skill in the art at the time the invention was made to position the tank of van der Lely et al. as modified by Demirag in a cooled environment in order to keep the milk from being spoiled and to maintain the cooling means to work properly (for example, if positioned in a hot environment, the cooling means would have to work extra hard to keep the tank cooled because of the hot environment, thus, the cooling means might be overworked).

For claim 4, van der Lely et al. as modified by Demirag (emphasis on Demirag) further disclose a wall of the tank is made from a flexible material such as a flexible bag (col. 1, line 48).

For claim 5, van der Lely et al. as modified by Demirag (emphasis on Demirag) further disclose that the inner sides of the walls of the tank are smooth and free of corners. Inner sides are considered to be only in the area near ref. 14 of fig. 2, where there is no corners and are smooth as shown.

For claim 7, van der Lely et al. as modified by Demirag (emphasis on Demirag) further disclose the flexible wall of the tank 17 is positioned in a receptacle 11 for supporting the flexible wall.

For claim 12, van der Lely et al. as modified by Demirag (emphasis on Demirag) further disclose the tank is transportable (col. 2, lines 26-30).

For claim 14, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) further disclose the milk tank 60 is provided with signaling means 123 for signaling when the storage volume has reached its maximum (col. 17, lines 1-10).

For claim 15, van der Lely et al. as modified by Demirag are silent about having a plurality of milk tanks, each having a signaling means coupled to a switchable valve. It is notoriously well known in the art of milking to have a plurality of tanks for containing milk in the event one tank is full, the milk is guided to another tank and so forth. Given this, it is also notoriously well known to have a switch valve couple to a signaling means in the tanks to indicate when one tank is full, the milk should be guided to another tank and so forth. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a plurality of milk tanks, each having a signaling means coupled to a switchable valve in the system of van der Lely et al. as modified by Demirag since it is notoriously well known in the art to have a plurality of milk tanks in a milking system to accommodate milk storage in the event one tank is full, the milk can be guided to another tank and so forth in order to maximize milk production.

For claim 16, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) further disclose a milking line 11 between a milking cup 10 and a milk tank 12; a discharge line 16 between the milking cup and a discharge vessel 36 for discharging cleaning fluid; and a control system 9,68. As for the at least two milk tanks and switching means, see the above claim 15 for explanation.

For claim 17, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) further disclose identification means (col. 4, lines 55-62) and memory means (inherent in the computer 9,68).

For claim 18, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) further disclose information regarding period of lactation are stored in the memory means (col. 15, lines 61-64). As for means for coupling the milking line to various milk tanks, see the above claim 15 for explanation.

For claim 19, van der Lely et al. as modified by Demirag (emphasis on van der Lely et al.) further disclose sensor means 6,7,8,15, incorporated in the milking line for measuring concentration of substance or property in the milk.

For claim 20, van der Lely et al. as modified by Demirag are silent about a plurality of milking stalls. It is notoriously well known in the milking art to have a plurality of milking stalls in order to allow milking of more than one cow. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a plurality of milking stalls in the milking device of van der Lely et al. as modified by Demirag in order to allow milking of more than one cow. As for the switching means in the milk tanks, see the above claim 15 for explanation.

For claim 22, van der Lely et al. disclose a method for milking animals comprising the steps of extracting milk from an animal in a milking stall (as shown in fig. 1); conveying de-aerated milk to a milk tank with a storage volume (col. 5, line 8); storing the milk tank for a prolonged period (col. 2, lines 55-60). However, van der Lely et al. are silent about the tank being a variable storage volume tank and transporting the milk tank for further processing. Demirag teaches a tank for storage of liquid in which the tank is a closed chamber 17 having a variable storage volume which corresponds to the volume of the liquid stored therein such that substantially no empty space is present in the closed chamber (see figs. 2 & 3). In addition, the tank of Demirag is made so that one can transport the tank from one location to another. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the variable storage volume tank as taught by Demirag in place of the storage tank of van der Lely et al. so as to provide a versatile tank which can function to carry liquid and to hold other items, thus saving space. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the step of transporting the tank as taught by Demirag to another location for further processing in the milking system of van der Lely et al. in order to allow the milk to be further inspected. Transporting milk for further inspection or processing is notoriously well known in the art of milking for a better milk quality; therefore, incorporating this step in the system of van der Lely et al. as modified by Demirag will not alter the invention and thus be beneficial for a better milk quality.

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3. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over van der Lely et al. as modified by Demirag as applied to claims 1 & 4 above, and further in view of Bender et al. (US 2905560). Van der Lely et al. as modified by Demirag are silent about the milk tank being rotationally symmetrical. Bender et al. teach a milk container or tank that is cylindrical or circular in shape and is rotationally symmetrical. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a cylindrical or circular shaped container or tank as taught by Bender et al. in place of the rectangular shaped tank of van der Lely et al. as modified by Demirag (emphasis on Demirag) in order to save storage space since the cylindrical or circular shaped occupied less area than that of the rectangular shaped (given the same storage volume comparison), and perhaps the cylindrical or circular shaped is more aesthetically pleasing in appearance than that of the rectangular shaped tank.

Response to Arguments

4. Applicant's arguments with respect to claims 1-7,12,14-20,22 have been considered but are moot in view of the new ground(s) of rejection. However, relevant arguments regarding the van der Lely et al. reference will be addressed herein.

Applicants argued that Demirag does not teach a milking apparatus and it is not a closed chamber with no empty space because of the vent pipe 38.

Van der Lely et al. have been modified with Demirag (as explained in the above rejection) for a tank having a closed chamber with a variable storage volume which varies with the amount of liquid therein. By modifying one tank (of van der Lely et al.)

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with another tank (of Demirag) does not alter the invention of van der Lely et al.

because the tank will still hold the liquid or milk.

Unfortunately, Applicants failed to claim what they meant by "closed chamber" because a chamber can be closed with a lid, completely closed with no access to interior, closed with ventilating means, closed with port and plug (as in the present invention), etc. So as one can see, there are numerous interpretation of "closed chamber", and therefore, it does not necessary means completely closed with no ventilation or the like. No where in the claimed language indicates that the tank does not permit entrance of air that may dry milk within the tank as argued.

Van der Lely et al. teach a device for milking animals in which the milk extracted from an animal is placed into a tank for storage and shipment. Demirag teaches a closed storage tank with closed chamber having variable storage volume corresponding to the liquid stored therein, which means that the chamber contours to the liquid therein so that empty space does not exist. Therefore, one of ordinary skill in the art would combine van der Lely et al. with Demirag for a teaching of a closed variable volume storage tank to provide a versatile tank which can function to carry liquid and save space at the same time due to its ability to have variable volume.

Conclusion

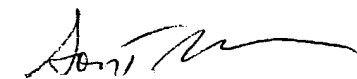
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is (703) 305-0765. The examiner can normally be reached on Monday - Friday from 9:00 a.m. to 5:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon, can be reached at (703) 308-2574. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (703) 872-9325. The official fax number is 703-872-9306.



Son T. Nguyen
Primary Examiner, GAU 3643
April 20, 2004